PIER

California Energy Commission

Public Interest Energy Research

PIER Program research promotes clean, affordable, safe and reliable electricity for California

The Public Interest Energy Research (PIER) Program supports public interest energy research and development that will help improve the quality of life in California by bringing environmentally safe, affordable and reliable energy services and products to the marketplace.

The PIER Program annually awards up to $62 million through 2001 to conduct the most promising public interest energy research by partnering with RD&D organizations including individuals, businesses, utilities and public or private research institutions.

PIER Program funding areas and benefits

PIER brings new energy services and products to the marketplace and creates state-wide environmental and economic benefits. PIER funding efforts are focused on the following RD&D program areas:

PIER

Public Interest Energy Research

CALIFORNIA ENERGY COMMISSION

Energy Innovation Small Grants Program provides funding to establish the feasibility of innovative energy research concepts. This program is intended to offer a simplified evaluation and funding process for small businesses, small non-profits, research institutions and individuals.

Residential and Non-Residential Buildings End-Use Energy Efficiency

Buildings end-use efficiency RD&D decreases energy costs and improves the quality of buildings through the development of improved energy-related building performance evaluation methods, construction practices, design strategies and energy-management tools and technologies. Energy efficiency research:

- facilitates the construction and operation of buildings that are energy efficient, healthy and comfortable
- improves building affordability and value through the development of cost-effective, energy efficient building products and strategies
- reduces energy costs through the development and use of energy efficient consumer options for reducing or managing loads

Industrial/Agricultural/ Water End-Use Energy Efficiency

Developing and demonstrating new technologies in this sector increases energy efficiency and reduces emissions and manufacturing costs for California industries, agriculture, and municipal water and wastewater systems. These new technologies improve the competitiveness of California businesses by:

- reducing the electricity used to transport and treat water and wastewater

- lowering the energy cost of industrial waste disposal and water decontamination
- improving on-site power quality and load management to improve electrical system reliability and capacity utilization
- enhancing process energy efficiency while reducing emissions and manufacturing costs

Renewable Energy Technologies

Renewable energy technologies RD&D provides California with more diversified energy sources, a more secure electricity infrastructure and improves the quality of the environment. These energy technologies include traditional renewable energy applications and renewable applications combined with fossil fuel-fired energy. Renewable energy research:

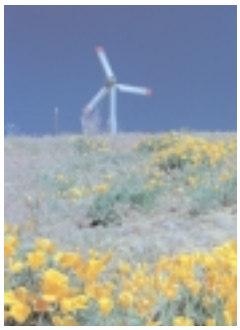
- lowers renewable energy capital and operating costs and improves conversion efficiency
- improves renewable energy reliability and power quality
- develops environmentally sound ways to use waste as an energy feedstock

Environmentally-Preferred Advanced Generation

Advanced generation RD&D produces technologies that improve the efficiency, reliability and/or environmental performance of electric generation technologies and provides new, smaller, cost-effective technologies for distributed generation. RD&D in this sector reduces electricity production costs, fuel consumption and the environmental impacts of electricity production and distribution. Advanced generation technologies:

- comply with future environmental constraints without compromising system efficiency

- demonstrate innovative electric generation cycles by testing hybrid combinations of cycles, developing novel cycles and evaluating the potential for using mixed fuels or co-firing



Energy-Related Environmental Research

Energy-related environmental research provides public benefits by improving scientific understanding and/or addressing the environmental effects and costs of energy production, delivery and use in California. Environmental research:

- develops new electricity applications and products to solve environmental issues
- defines electricity systems facilities environmental impacts and mitigation
- determines how electricity generation contributes to global climate change and develops innovative mitigation approaches

Strategic Energy Research

Strategic energy research RD&D activities cover two or more program areas, represent potential high-risk/high-reward advances or provide energy-related public interest science and/or technologies not addressed in other program areas. Activities include system-related projects that integrate renewable energy, advanced generation, energy efficiency and/or environmental technologies. Strategic research:

- improves the reliability and efficiency of the electrical transmission, distribution and delivery grid
- makes the electricity system safer and more resistant to damage and interruptions from natural disasters
- identifies new electrical generation and transmission system management techniques

Commissioners

William J. Keese, Chairman

David A. Rohy, Vice Chairman

Michal C. Moore, Commissioner

Robert A. Laurie, Commissioner

Robert Pernell, Commissioner

Visit our web site to learn more about the PIER Program

For up-to-date information on the PIER Program or the Energy Innovations Small Grant Program, please visit the Energy Commission's Web Site at: www.energy.ca.gov/research/PIER or contact the Commission at (916) 654-4628. To be put on the PIER mailing list for funding opportunity notices, please complete and mail or FAX the attached form specifying the program(s) you would like to receive information on. The Commission also maintains an automated e-mail system to alert participants of current requests for proposals and other funding announcements.

PIER Information Manager
California Energy Commission
1516 Ninth Street, MS43
Sacramento, CA 95814

FAX: (916) 653-6010

Please add me to the PIER mailing list for the following program(s):

- ☐ Buildings
- ☐ Advanced Generation
- ☐ Ind./Ag./Water
- ☐ Environmental
- ☐ Renewables
- ☐ Strategic

NAME: _____

ORGANIZATION: _____

ADDRESS: _____

CITY: _____

STATE: _____ ZIP CODE: _____

PHONE: _____

FAX: _____

EMAIL: _____

PIER Information Manager
California Energy Commission
1516 Ninth Street, MS43
Sacramento, CA 95814

Printed on recycled paper

Phone: (916) 654-4628

www.energy.ca.gov/research/PIER

P500-99-015